

CLAIMS

1. A semiconductor package comprising:

a semiconductor device with one or more device-side  
5 electrodes being formed on a circuit-bearing surface; and  
a flexible substrate having a patterned wiring and a  
thermoplastic insulating layer formed on either or both sides of  
the patterned wiring, the flexible substrate being bent around  
said semiconductor device, wherein:

10 said flexible substrate has a first electrode provided on  
said semiconductor device-side surface of said flexible substrate,  
the first electrode being connected to said device-side electrode  
of said semiconductor device and sealed by said thermoplastic  
insulating layer, and a second electrode provided on a surface  
15 different from the surface on which said first electrode is  
provided; and

said flexible substrate has at least two or more layers of  
patterned wiring formed thereon.

2. The semiconductor package according to claim 1, wherein  
20 said flexible substrate has a groove or a portion having  
less number of wiring layers formed at a bend of said flexible  
substrate or on a region including the bent.

3. The semiconductor package according to claim 2, wherein  
said flexible substrate has a cavity formed on said  
25 flexible substrate so as to accommodate said semiconductor device  
in said cavity portion.

4. The semiconductor package according to claim 2, wherein  
said flexible substrate includes portions where the

flexible substrate is bent and which are directly adhered to each other.

5        5. The semiconductor package according to claim 1, wherein  
said flexible substrate has a cavity formed on said  
flexible substrate so as to accommodate said semiconductor device  
in said cavity portion.

6. A semiconductor package comprising:  
a semiconductor device with one or more device-side  
electrodes being formed on a circuit-bearing surface; and  
10        a flexible substrate having a patterned wiring and a  
thermoplastic insulating layer formed on either or both sides of  
the patterned wiring, said flexible substrate being bent around  
said semiconductor device, wherein:

15        said flexible substrate has a first electrode provided on  
said semiconductor device-side surface of the flexible substrate,  
said first electrode being connected to the device-side electrode  
of said semiconductor device and sealed by said thermoplastic  
insulating layer, and a second electrode provided on a surface  
different from the surface on which said first electrode is  
20        provided; and

      said flexible substrate includes portions where the  
flexible substrate is bent and which are directly adhered to each  
other.

25        7. The semiconductor package according to claim 6, wherein  
the semiconductor device is accommodated in a recessed  
portion created by said flexible substrate being bent and  
directly adhered to each other.

8. A stacked semiconductor package wherein

a plurality of semiconductor packages of the same type or different types according to any one of claims 1 to 7 are electrically connected via said electrodes and three-dimensionally stacked in layers.